# Castlemaine Naturalist

July 2023

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Monthly newsletter of the Castlemaine Field Naturalists Club Inc.



"Ecological Decomposers".

Artwork by Louise Saunders

## June Monthly Meeting – Guest Speaker, Louise Saunders "Botanical Art – increasing environmental awareness"

Louise Saunders is a professional botanical and wildlife artist who was born and grew up in Benalla in Victoria's North East. Her mother was an enthusiastic gardener and naturalist. Louise developed similar interests and delighted in all the wildflowers that grew on her grandparent's property, particularly the many ground orchids in the area which she fell in love with, including the rare purple donkey orchids. Louise's family were keen on a variety of arts and crafts including pottery and she also developed many interests in creative arts. This early passion for nature, particularly wildlife and plants, continued to develop and she became a keen painter. Her pictures were noticed and admired regionally and nationally and, with advice and encouragement of the well-known botanists, Mark Clements and David Lloyd Jones, she accepted a challenge to paint all the orchids of NE Victoria. This resulted in 88 (out of a possible 120) exquisite portraits of some of the region's unique and beautiful ground orchids, each painted in a background of vegetation typical of their habitat.

Louise went on to have many exhibitions of her work, starting with one in the Benalla Regional Art Gallery. She progressed on to a career as a professional botanical artist, expanding her portfolio to include subtropical native plants and native animals after relocating to SE Queensland. She enjoys painting her flora or fauna subjects in their natural habitat. She has continued to expand her artistic range to include portraits of pets and exotic animals.

Louise has travelled internationally to pursue her art through residencies and expeditions, including as an illustrator on two Earth Watch expeditions and travelled to Thailand and Borneo and has had her work published in books and magazines.

She enjoys the challenge of working with a number of media including watercolour, fine art pencils, acrylic and pastels. She was subsequently appointed as artist-in-residence at an eco-tourist resort on the Gold Coast, where further exhibitions of her works resulted in sales of her works nationally and internationally, some to well-known clients including the actor Jack Thompson and Lady Susan Renouf.

Louise also became a dedicated wildlife conservationist and rescuer, particularly involving bat rescues during the Hendra and Australian Bat Lyssavirus outbreaks. She fostered many orphaned baby bats, becoming very attached to them.

She regularly donates a percentage from sales of her paintings to wildlife and conservation causes and has donated one of her paintings to support the protests against the commercial development of the Toondah Harbour, on Redlands Coast Qld, an important koala and migratory shorebird habitat.

She was awarded a medal of the Order of Australia in 2019 for her services to wildlife conservation and visual arts. She is a member of several art societies including Queensland Wildlife Artists' Society, Botanical Art Society Australia and Artists for Conservation.

At our June meeting, Louise gave a presentation about her art and conservation work, illustrated with many examples of her beautiful artwork.

Further information can be located on **Louise's website**.

**Judith Nimmo** 

#### Samples of Louise Saunders' artwork



On the forest edge (Antechinus sp.)



Australian Wildflowers

# Excursion to McCay Reservoir, 10 June 2023 Catherine Harboe-Ree

Twenty-six hardy souls braved the chilly weather for the opportunity to visit McCay Reservoir, which is not generally open to the public. Amongst our number were several visitors, and members attending their first excursion. Our leader was the energetic Kylie McLennan, Coliban Water's Reservoir, Rural and Catchment Coordinator.



McCay Reservoir, looking down towards the dam wall and control tower. Photo: Noel Young

Constructed from May 1959 to November 1960, McCay Reservoir is a holding and retention basin for the supply of water sourced from the Coliban River storages to Castlemaine, Maldon, Harcourt, Newstead, Fryerstown and Guildford. The reservoir, which has a capacity of 1,360 million litres, sits in a very small catchment of 180 hectares comprising predominantly heathy dry forest. The reservoir was originally called Castlemaine Reservoir, but was renamed in McCay. honour of H.W. commissioner of the State Rivers and Water Supply Commission.



Kylie showing maps of the reservoir. *Photo: Lou Citroën* 

The highlight of the excursion was the old Poverty Gully Tunnel, constructed in the 19<sup>th</sup> century and still an essential part of the water supply for this district. The tunnel is 756 metres long, about 1.2 metres wide and 1.5 metres high. It supplies water from the Coliban Main Channel to McCay Reservoir. Another highlight was watching Kylie doing push-ups from time to time as part of a charity drive to raise funds for mental health (Push for Better Foundation)!



Participants in the excursion standing beside the tunnel and channel. *Photo: Liz Albert* 



Poverty Gully Tunnel. Photo Lou Citroën

No doubt due to the time of year, there were not many birds or invertebrates, but we did see several colonies of whirligig beetles in the channel adjacent to the tunnel entrance and a good number of fungi species. At the end of our tour, Kylie took us up a ridge to show us a particularly rich area of grassy woodland, with Red-anther Wallaby Grass and many native herbs and shrubs.

# Why is *Discaria pubescens*, the Hairy Anchor-plant, so rare? David Cheal

Discaria pubescens, the Hairy Anchor-plant or Australian Anchor-plant, is a notable local rarity. It is listed as 'Critically Endangered' under the Victorian legislation (the Flora & Fauna Guarantee Act 1988, the FFG) and is considered 'Near Threatened' in Queensland and 'Endangered' in Tasmania. The text in the Flora of Victoria online mentions it as "Now extremely rare west of Melbourne (Ballarat district only) and

possibly extinct in the north-east (formerly known from Mansfield, Wodonga and areas), Mitta scattered uncommon in the east (Snowy Range, district, Wulgulmerang, Benambra area. Bendock). usually Cobberas associated with basaltic substrate near in cool. elevated areas". streams, Despite all this, it has a few records from our local area, mostly near the Campaspe River (which passes thru basalt country from Kyneton towards Lake Eppalock).

D. pubescens is a bit of weirdo. It's in the family Rhamnaceae that includes all the Pomaderris species but looks so very



**1.** Hairy Anchor-plant *Discaria* pubescens. *Photo: David Cheal* 

different, being a mass of rather pungent (vicious even) spines & substantially leafless. The Action Statement No. 47 (under the FFG) refers to its occurrence 'in steam and river valleys in western Victoria', although it also mentions that a few occurrences are 'some distance from drainage lines and streams'.

I became familiar with it during targeted surveys throughout the Victorian Alps and

noted that it was always heavily browsed (see photo 1, from MacFarlanes Flat in the far east of the Alpine National Park, above Suggan Buggan). Nevertheless, it was not notably associated with streams in the Alps. many observers, its remnant occurrences along streams suggested that it required the extended soil moisture in such situations and this was its prime habitat. However, there is more to streamside habitats than purely extra soil moisture. Its precise habitat in lowland sites is not just beside streams, but amongst the basalt boulders and rocks that often characterize streams thru basalt country. A useful experiment suggested itself, utilizing the basalt scarps and outcrops of my property at Redesdale.

Tubestock of *D. pubescens* was obtained and planted amongst the outcropping basalt rocks high on an escarpment (nowhere near a



2. Mature Discaria pubescens
Photo: David Cheal

stream, which is 30m alt. below). Most soon disappeared, but in the meantime an exclusion fence was erected over the outcropping scarp and the remaining *D*. pubescens plants were protected with 90 cm wire mesh guards. In subsequent years these few D. pubescens grew very well and the largest is now 1.5m tall and has bloomed (photo 2). There are wallabies. rabbits. hares wombats inside the exclusion fence. Regrettably, a wallaby (Black Wallaby, Wallabia bicolor) got inside when the gate was left open recently and the next day all the Discaria had been nibbled. Further recent plantings of Discaria seem to be establishing well.



Discaria pubescens – showing detail of the spines. Photo: David Cheal

The conclusion from this account is that the greatest threat to *D. pubescens* is its (unexpected) high palatability. Reducing or removing browsing mammals should be the highest priority for all extant stands and newly-established stands. Its restriction to riparian sites in our region is likely not due to any moisture requirement, so much as resulting from the browsing protection that growing amongst rocks can offer. In particular and in our region, Black Wallabies (*W. bicolor*) are the major threat and rabbits are suspected to be a notable threat too. In the Alps, horses and deer are suspected to be the major threats.

# Observations Pterostylis striata (Striated Greenhood) – Russell Stanley

Russell came across some nice clusters of Pterostylis striata Maldon a couple of days ago. He mentions it only because it is a species absent from Ern Perkins' Castlemaine Orchids webpage. It was growing close to the dam on Smiths Reef Track.



Pterostylis striata, the Striated Greenhood.

Photos: Russell Stanley

### **Australian Shield Shrimps – Peter Turner**

While on a recent trip to Simpson Desert we sighted these small orange crustaceans moving in muddy water - Shield Shrimps, *Triops australiensis*. In his recent book on Australian deserts Steve Morton summarises the lifecycle of these 'living fossils:

The gibber plain has been baking dry for a couple of years when storms finally gather and dump 40 mm across glistening stones and scattered saltbush. Water gathers in ... clay pans, a few cm deep. Within a couple of days, the cloudy red water is churning with shield shrimps gathered in squirming masses to feed on algae and organic matter.





Triops australiensis, Shield Shrimp. Photos: Peter Turner

Most earlier references specify two species of shield shrimp (also called tadpole shrimp) in Australia, *T. australiensis* and *Lepidurus apus*. Atlas of Living Australia distribution maps show *Triops* occurs primarily in the dry inland and *Lepidurus* in more southerly regions: Euan Moore has photos of *Lepiduris apis* from wetlands in SW Victoria. *Triops* have two compound eyes and a third simple eye that emerges during early stages of the animal's development. The large shield-shaped carapace covers the head and thorax with many legs (see photos). Reproduction is both sexual and by self-fertilisation of females. Eggs are laid near the edges of the water

body and can remain dormant for many years if there is no rain. The fossil record reveals that the species has hardly changed for 250 million years....And here they are still, hatching from desiccation-resistant eggs the instant the dust is flooded, completing their life cycle in just a few weeks of furious activity [Morton, p204].

Ref: Steve Morton (2022) Australian Deserts – Ecology and Landscape. CSIRO Publishing

In addition the group visited the Mac Clark Conservation Reserve SE of Alice Springs. This healthy woodland reserve is one of three areas in Australia where the unusual *Acacia peuce* tree is found.

https://en.wikipedia.org/wiki/Acacia peuce



Acacia peuce tree showing white seed pods. Photo: Peter Turner

### "It was a beaut lookin' fella, that fancy rosella"- Kerrie Jennings

Both grandchildren eyed the pot plant and Grannie's new ceramic bird. Hugh (4yo) said it's a 'Rosella', Evie (6yo) said no, it's a 'Parrot'. With a full-blown barney erupting over the ID of Grannie's new bird, an exasperated Hugh left the room shortly to return with his version of a field guide, ('There was an old lady who swallowed a mozzie'), triumphantly slapped it open on the table, "Seeee, Evie! It's a Ro-sel-laaa!! Granny had to get out Pizzey & Knight to explain ...





Left:
Hugh's reference manual!

### **Duelling Raptors - Ash Vigus**

Keen local birder and photographer, Ash Vigus. sent these great photos of a Peregrine Falcon fending off a Brown Falcon trying to grasp the Peregrine's kill. They were seen near Muckleford Station. The Peregrine only had one eye but won the duel.



No you don't!
The Brown Falcon concedes.

Photo: Ash Vigus



The Victor – Peregrine Falcon

Photo: Ash Vigus

#### **More Observations**



Starfish fungus Aseroe rubra Photo: Sue Oldfield



Rosy Heath-myrtle, Euromyrtus ramosissima. Sighted along the Loop Tk. Photo: Peter Turner.



Beach Stone-curlew on a beach near the mouth of Boggy Ck, Merimbula. Well south of its normal range. Photo: Euan Moore



Chelepteryx collesi Batwing Moth, Bega. Wingspan approx. 150mm. Photo: Euan Moore



Pterostylis melagramma
Sue Teltscher spotted this Tall
Greenhood on the edge of the
Goldfields Tk.

Photo: Peter Turner

#### Binds of Sutton Grange - June 2023 High Hatted

#### From the Commit

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### **Coming Events**

Monthly Meeting: Friday 14th July, 7.30pm by Zoom.

Speaker: Dr Matt West (University of Melbourne Biosciences) "Protecting frogs from Chytrid fungus".

See Back Page for details on how to join the Zoom meeting.

Matt will talk about his research studies into the Chytrid fungus that is causing a serious decline in our frog populations. Matt is identifying factors that influence frog disease susceptibility and strategies for protecting frogs from this fungus. He will also describe projects to translocate healthy populations of frogs, including the Growling Grass Frog, to boost populations at other sites where they were once more common.

Excursion: Sat 15th July, 1.30pm. "Maldon Historic Reserve Flora Surveys"

Leaders: Euan Moore and Richard Piesse.

Our July excursion will be to the Gower area of the Maldon Historic Reserve. The purpose of the visit will be to look at some of the vegetation plots established by Ern Perkins around 2009 to monitor the effects of bush fires and fuel reduction burns on the native vegetation. We will remeasure one or possibly two of these quadrats and demonstrate the methodology used. We will also make a quick visit to another set of quadrats that have been subject to intense fire so that we can see the differences in impact between no fire, light fire and intense fire. The bush is starting to show the effects of winter rain and approaching spring. Some plants are already starting to flower and many herbs, including orchids, are starting to shoot. The wetter conditions also mean that there is an abundance of fungi. There will be a chance to explore the area to record and photograph those plants that are already flowering.

**Meet: for 1.30pm** departure from the Octopus car park (Duke St, opposite the Castle Motel) **or 1:45pm** at Smiths Reef dam.

**Bring:** water, afternoon tea, sturdy shoes and if necessary, wet weather gear.

Boot hygiene: due to concern about spreading plant pathogens in our soils, please clean your boots thoroughly before leaving home (scrub off dirt and remove seeds). On arrival at the excursion site, we will spray the soles of our boots with Phytoclean. Again, we will brush dirt etc. off our boots before leaving.

The Field Trip will be cancelled in extreme weather conditions.



This quadrat had a patchy burn in 2009. How does it look now? *Photo: Ern Perkins* 

#### Advance Notice - September Excursions

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